Clean Air Facts

Plastic Parts Coating RACT

SBCA-PPR-0501

Wisconsin Department of Natural Resources (DNR) was required to submit a 1-Hour Ozone Attainment Demonstration Plan to the US Environmental Protection Agency (EPA) by December 2000. The demonstration plan was necessary to meet EPA's requirements for a complete State Implementation Plan (SIP). Also part of the demonstration plan is a rule for the reasonably available control technology (RACT) for plastic parts coating operations. The rule is detailed in s. NR 422.083, Wis. Adm. Code.

Plastic part coating is defined as coating applied to any part made from a material "formed from resin through application of pressure or heat or both."

Applicability and Exemptions

This rule only affects those facilities that are a major source of VOC emissions from their "affected" plastic parts coating operations. For our purposes here, "affected" means those operations not already regulated by another RACT rule.

How do you determine if parts of your plastic parts coating operations are already regulated by another RACT rule? If you have a permit and you are already affected by a RACT rule you will see the following sections of the Wisconsin Administrative Code listed with your limits:

❶ sections NR 419.05, 419.06 or 419.08,
❷ any section in chapters NR 420 and 421,
❸ sections NR 422.05 to 422.08 or 422.085 to 422.17, or
❹ sections NR 423.03, 423.035, 423.04, 423.05, 424.04 or 424.05.

You are a major source if your maximum theoretical emissions (**MTE**) of VOCs from the affected plastic parts coating operations are:

- greater than 25 TPY and you are located in Kenosha, Milwaukee, Ozaukee, Racine, Washington or Waukesha counties; OR
- greater than 100 TPY and you are located in Kewaunee, Manitowoc or Sheboygan counties.

The MTE is the level of emissions you would generate if you operated continuously at full capacity for the whole year, and **not** taking into account any emissions reductions from any control device installed.

The MTE calculations for VOCs from the affected plastic parts coating operations are then as follows:

1. Total MTE of VOCs from the whole facility, and
2. MTE of VOCs that are regulated by an existing VOC RACT rule.
3. Then subtract the amount in #2 from the amount in #1.

The amount calculated in #3 must be greater than the applicability levels of 25 TPY or 100 TPY, depending on your location, for this rule to apply.

For assistance on calculating the MTE of VOCs for your facility, you can contact the Small Business Clean Air Assistance Program (SBCAAP). Staff will go over the cal-

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FROM THE SMALL BUSINESS CLEAN AIR ASSISTANCE PROGRAM
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culations with you or send you a fact sheet with some example calculations.

This rule also includes an exemption for plastic parts coating operations that are already regulated under:

- NR 422.095, 422.10, 422.11 or 422.125; or
- NR 422.09, 422.10 or 422.15 where plastic parts are attached to metal parts prior to coating.

Requirements

The emissions limits are listed by type of operation in Table 1. If these limits apply to you, you must be in compliance by **December 31, 2002**. Also after that date, no facility may emit over 6,200 pounds of VOCs per year from the use of extreme performance coatings.

Whether or not you are exempt from the limits in the rule, you will need to maintain some records to demonstrate to the department that you are in compliance.

Compliance Required by December 31, 2002

If you are exempt based on your MTEs of VOCs, then you must keep records to demonstrate those calculations. In this case, these are one-time records you will need to create unless you expand your facility. After an expansion of your facility, which may or may not require a ***construction permit***, you will need to recalculate your MTE to demonstrate whether or not you are still exempt.

If you must meet the emission limits then you need to keep records of the VOC content of **each** coating used, in pounds VOC per gallon excluding water. **Any records you create will need to be maintained on site for five years.**

Table 1

Activity	VOC Content (lb/gal)
*** Automotive/transportation**	
- Interiors	
~ Baked: Prime/Non-clear Coats	3.8/4.1
~ Air dried: Prime/Non-clear Coats	3.5/4.9
- Exteriors	
~ Baked	
> Prime Coats (elastomeric/non-e)	5.0/4.5
> Clear Coats	4.3
> Other Coatings	4.6
~ Air dried	
> Prime Coats	5.5
> Clear Coats	4.5
> Other Coatings (red & black/other)	5.6/5.1
~ Specialty	
> vacuum metallizing, texture basecoats	5.5
> reflective argent, air bag cover, and soft coatings	5.9
> antiglare/safety coating, vacuum metallizing and texture topcoat	6.4
> stencils, adhesive primers, pad printing, electrostatic prep, and resist coatings	6.8
> head lamp lens coatings	7.4
*** Business Machine**	
- Prime Coats	2.9
- Other Non-clear Coatings	2.9
- Specialty	
~ Electromagnetic interference/radio frequency interference (EMI/RFI) shield coatings	4.0
~ Soft coatings	4.3
~ Resist coatings	5.9
~ Sensitizer coatings	7.1
*** Miscellaneous**	
- Air cleaner covers	6.0
- Building exterior shutters, weather stripping, trim and molding	6.2
- Building interior molding & trim	2.5
- Cosmetic cases	
~ Opaque coatings	4.8
~ other coatings	5.9
- Personal hygiene razors	
~ Soft coatings	5.5
~ Other coatings	6.2
- Signs	
~ Mask coatings	0.8
~ Opaque coatings	5.9
~ Other coatings	6.5
- Smoke detector covers	6.2

Contacts for More Information or Assistance.

The Small Business Clean Air Assistance Program helps smaller businesses understand and comply with the Clean Air Act regulations. Contact one of the program's Clean Air Specialists for more assistance: Renée Lesjak Bashel at 608/264-6153 or Tom Coogan at 608/267-9214.

For further information on the plastic parts RACT rule contact your DNR Regional or Service Center office shown on the **DNR Contact Fact Sheet** or the DNR's Central office at 608/266-2856.